Manitoba Agriculture

FARM BUSINESS MANAGEMENT

nformation Update

Guidelines For Estimating

Feedlot Finishing Costs

For Weight Range of 650 - 1400 lbs.

Based on feeding 500 Steers

DATE: September, 2000

Cattle feeding is a high risk business requiring large amounts of short term capital to buy feeder cattle and feed. With cyclical price variations for both livestock and feed, successful management involves careful consideration of costs, projection of markets and sound judgement.

The following budget is an estimate of the costs of production encountered in finishing beef cattle in a farm feedlot situation. The purpose of this budget is to assist Manitoba livestock producers to calculate their own cost of production and take into consideration the factors that should be included when budgeting to determine breakeven prices.

The assumptions on which costs are calculated are clearly defined in the supporting pages. When interpreting these costs for an individual situation, adjustments may be required. Note that on farm feed costs are based on market prices at the farm. It is assumed that all feed is grown on the farm, except for supplements. Each assumption must be examined and adjustments made, where necessary, to apply to the producer's own situation

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Feedlot Finishing Cattle Production Cost Summary 2000

	Cost/Head	Total Cost	Your Cost
A. Operating Costs			
1. Feed Costs			
1.01 Rolled Barley	192.71	96,355	
1.02 Barley Silage	39.06	19,530	
1.03 Grass Hay	1.50	750	
1.04 Supplement	21.50	10,750	
Total Feed Costs	**$254.77**	**$127,385**	
2. Other Operating Costs			
2.01 Feeder Cost	957.13	478,565	
2.02 Straw	7.50	3,750	
2.03 Veterinary Medicine & Supplies	17.62	8,810	
2.04 Annual Fuel & Repair Costs	6.80	3,400	
2.05 Utilities	5.40	2,700	
2.06 Marketing & Transportation	64.19	32,095	
2.07 Insurance	7.13	3,565	
2.08 Manure Removal	6.00	3,000	
2.09 Barn & Office Supplies	0.32	160	
2.10 Death Loss	11.10	5,550	
Subtotal Operating Costs	1,337.96	668,980	
2.11 Operating Interest	66.49	33,243	
Total Operating Costs	**$1,404.45**	**$702,223**	
B. Fixed Costs			
3. Depreciation			
3.01 Buildings	5.55	2,775	
3.02 Machinery & Equipment	12.00	6,000	
4. Investment			
4.01 Buildings	3.39	1,697	
4.02 Machinery & Equipment	4.50	2,250	
Total Fixed Costs	**$25.44**	**$12,722**	
Total Operating and Fixed Costs	**$1,429.89**	**$714,945**	
5. Labour	20.00	10,000	
TOTAL COST OF PRODUCTION	**$1,449.89**	**$724,945**	

Cost per lb of gain sold	**$/cwt**	
Feed Costs	$37.47	
Operating Costs	$67.93	
Operating & Fixed Costs	$71.67	
Total Costs	$74.62	
Breakeven Selling Price		
Operating Costs	$105.60	
Operating & Fixed Costs	$107.51	
Total Costs	$109.01	

Assumptions

1. Average daily gain (ADG) was assumed to be 3 lbs/day.
2. It was assumed that the feeder steer weighed in at 650 lbs., and finished at 1400 lbs (1330 lbs after a 5% shrink.)
3. Days on feed was 250. Hay was fed for 15 days.
4. Investment in feedlot facilities and equipment was assumed to handle 500 head.

Feedlot Finishing Production Cost Worksheet

A. Operating Costs — **Your Cost**

1. Feed Costs

1.01 Rolled Barley

	250	days on grain	
x	18.50	lbs/feeder/day	
÷	48	lbs/bushel	
x	$2.00	/bushel	
=	**$192.71**	**/feeder**	

1.02 Barley Silage

	250	days on silage	
x	12.5	lbs/feeder/day	
÷	2,000	lbs/ton	
x	$25.00	/ton	
=	**$39.06**	**/feeder**	

1.03 Grass Hay

	15	days on hay	
x	5.0	lbs/feeder/day	
÷	2,000	tons fed	
x	$40.00	/ton	
=	**$1.50**	**/feeder**	

1.04 Supplement (Salt, Vitamins, Minerals, Ionophore)

	250	days on supplement	
x	0.8	lbs/feeder/day	
x	$215.00	/ton	
=	**$21.50**	**/feeder**	

2. Other Operating Costs

2.01 Feeder Cattle Cost

Buying Commission

	$6.50	/feeder	_____

Trucking-in

	$1.25	/cwt	_____
x	650	lbs/feeder	_____
÷	100	lbs/cwt	_____
=	$8.13	/feeder	_____
	650	lbs/feeder	_____
x	$145.00	/cwt	_____
÷	100	lbs/cwt	_____
=	$942.50	/feeder	_____
Total =	**$957.13**	**/feeder**	_____

2.02 Straw

	0.50	tons/feeder/year	_____
x	$15.00	/ton	_____
=	**$7.50**	**/feeder**	_____

2.03 Veterinary Medicine & Supplies

Cattle Medication

	$5.40	IBR,PI3,BVD,BRSV	_____
+	$0.64	Vitamin A,D & E	_____
+	$3.80	External & Internal Parasites	_____
+	$0.55	Blackleg	_____
+	$3.20	Implant	_____
+	$3.00	Antibiotics	_____
=	$16.59	/feeder	_____

Professional Services

	$90.00	/hour charge	_____
x	2.50	hours	_____
÷	500	feeder cattle	_____
=	$0.45	/feeder	_____

Transportation Costs

	$0.90	/km charge	
x	80	kilometres	
x	4	visits	
÷	500	feeder cattle	
=	$0.58	/feeder	
Total =	**$17.62**	**/feeder**	

2.04 Annual Fuel & Repair Costs

	$1,200.00	repairs	
+	$2,200.00	fuel costs	
÷	500	feeder cattle	
=	**$6.80**	**/feeder**	

2.05 Utilities

	$2,700.00	/year	
÷	500	feeder cattle	
=	**$5.40**	**/feeder**	

2.06 Marketing & Transportation

Trucking	700	miles	
x	$3.00	/loaded mile	
÷	38	head/load	
=	$55.47	/feeder	
Other US Costs +	$8.72	/feeder	
Total =	**$64.19**	**/feeder**	

2.07 Insurance

	$136,707	building & equipment investment	
x	$0.60	/$100 capital	
÷	100	/$100 capital	
÷	500	feeder cattle	
=	$1.64	/feeder/year	
	$603,125	herd investment	
x	$0.45	/$100 capital	
÷	100	/$100	
÷	500	feeder cattle	
=	$5.43	/feeder/year	
	$30.00	liability premium	
÷	500	feeder cattle	
=	$0.06	/feeder/year	

Total	**=**	**$7.13**	**/feeder**	_____

2.08 Manure Removal

	$3,000	annual removal cost	_____
÷	500	feeder cattle	_____
=	**$6.00**	**/feeder**	_____

2.09 Barn & Office Supplies

	$160.00	total barn expenses	_____
÷	500	feeder cattle	_____
=	**$0.32**	**/feeder**	_____

2.10 Death Loss

	$957.13	feeder cattle cost	_____
+	$1,262.67	maximum value	_____
÷	2.0	average value	_____
x	1.00	% mortality rate	_____
=	**$11.10**	**/feeder**	_____

2.11 Operating Interest

	$957.13	feeder cost	_____
+	$184.87	½ of feed & other costs	_____
x	8.50	% operating interest	_____
x	250	days on feed	_____
÷	365	365 days	_____
=	**$66.49**	**/feeder**	_____

Capital Costs

Buildings,Corrals & Water System	
Windbreak fence	$4,900
Pens	$3,027
Handling Facilities	$4,000
Waterers	$4,000
Gates	$1,280
Bunk Feeders	$23,000
Well & Pressure System	$3,500
Grain Bin	$3,000
Landscaping	$15,000
Total	**$61,707**
Machinery & Equipment	
Tractor & Loader	$50,000
Miscellaneous	$25,000
Total	**$75,000**
Total Investment	**$136,707**

B. Fixed Costs

3. Depreciation $\frac{\text{Original Cost - Salvage Value}}{\text{Useful Life}}$

3.01 Buildings

$61,707		original cost
- $6,171		salvage value
÷ 20		years useful life
÷ 500		feeder cattle
= **$5.55**		**/feeder**

3.02 Machinery & Equipment

$75,000		original cost
- $15,000		salvage value
÷ 10		years useful life
÷ 500		feeder cattle
= **$12.00**		**/feeder**

4. Investment $\frac{\text{Original Cost + Salvage Value}}{2}$ **x Investment Rate**

4.01 Buildings

	$61,707	original cost	
+	$6,171	salvage value	
÷	2	average	
x	5.00	% investment rate	
÷	500	feeder cattle	
=	**$3.39**	**/feeder**	

4.02 Machinery & Equipment

	$75,000	original cost	
+	$15,000	salvage value	
÷	2	average	
x	5.00	% investment rate	
÷	500	feeder cattle	
=	**$4.50**	**/feeder**	

5. Labour

	2.0	hours/feeder/year	
x	$10.00	/hour	
=	**$20.00**	**/feeder**	

Breakeven Calculations

				Your Farm
Cost per lb of gain sold				
Feed Costs		$254.77	feed cost	
	+	680	weight gain	
	=	**$0.37**	**/lb**	
Operating Costs		$1,404.45	operating costs	
	-	$942.50	feeder cost	
	+	680	weight gain	
	=	**$0.68**	**/lb**	
Total Operating & Fixed		$1,429.89	operating & fixed	
	-	$942.50	feeder cost	
	+	680	weight gain	
	=	**$0.72**	**/lb**	
Total Costs		$1,449.89	total	
	-	$942.50	feeder cost	
	+	680	weight gain	
	=	**$0.75**	**/lb**	
Breakeven selling price				
Operating Costs		$1,404.45	operating costs	
	+	1,330	lbs shrunk weight	
	=	**$1.06**	**/lb**	
Operating & Fixed		$1,429.89	operating & fixedcosts	
	+	1,330	lbs shrunk weight	
	=	**$1.08**	**/lb**	
Total Costs		$1,449.89	total costs	
	+	1,330	lbs shrunk weight	
	=	**$1.09**	**/lb**	

For more information contact your local Manitoba Agriculture and Food Office.

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Beef Finishing Feedlot 500 Head